MITSUBISHI ELECTRIC

Air Conditioning
Heat Pumps

Deluxe Inverter Wall Mounted ***MSZ-FB Series***

- Quietest Heat Pump in NZ*
- Plasma Duo Filter System
- Energy Saving "i-see Temperature Sensor"
- Self Cleaning "Ozone Shower"
- Optional 7 Day Timer

Advanced Energy Saving
i-see Sensor

You want to feel the warmth, not hear it.

*MSZ-FB25VA at Low Fan Speed and Maximum Output,
as at 1st September 2008 in the 2.5 and 3.5kW Cooling Range.

Quietly Superior

MITSUBISHI ELECTRIC

DELUXE WALL-MOUNTED MSZ-FB Series

Advanced Energy Saving "i-see Temperature Sensor" Plasma Duo Filter System

Introducing the state-of-the-art range of Mitsubishi Electric Deluxe Inverter Heat Pumps featuring the "i-see Sensor". This advanced sensing technology reduces energy consumption by maintaining air temperature and controlling air movement to prevent excessive heating and cooling as well as unnecessary operation. This range is also specifically designed to combat and reduce common household allergens and unpleasant odours, providing the optimal air quality that is vital for asthma and allergy sufferers.

Advanced Energy Saving i-see Sensor

The new advanced energy saving "i-see Sensor" searches out temperature differences and directs heat where you really need it.

Dimensions (W x D x H): 798 x 257 x 295mm

MSZ-FB25VA (MSZ-FB25VA + MUZ-FB25VA)
Cooling Capacity: 2.5 (1.1~3.5) kW
Heating Capacity: 3.2 (1.5~5.5) kW

MSZ-FB35VA (MSZ-FB35VA + MUZ-FB35VA)
Cooling Capacity: 3.5 (1.1~4.1) kW
Heating Capacity: 4.0 (1.5~6.0) kW

MSZ-FB50VA (MSZ-FB50VA + MUZ-FB50VA)
Cooling Capacity: 5.0 (0.8~5.8) kW
Heating Capacity: 6.0 (0.9~7.8) kW

ENERGY STAR is the global mark of energy efficiency. All models in the FB range have been awarded the ENERGY STAR signalling that they meet strict energy efficiency guidelines. You can rest assured these will provide the highest level of energy efficiency without compromising on performance or quality.

Plasma Duo Filter Systems

Ideal for Asthma and Allergy sufferers.

R410A

HEAT PUMP

DC Inverter

Infra Red Remote Controller

Cleaning-free, pipe reuse

F-INVERTER

DC Inverter | PAM Control | Only 20dB (FB25) | Econo Cool | Anti-Mold | AREA (Area setting) | AUTO VANE | SWING (VERTICAL) | SWING (HORIZONTAL) | Ozone Shower

Flat Panel | Pure White | Compact | 24-hour Timer | ACO | Auto Restart | Cooling at 46°C/-10°C | Cooling at -10°C | Heating at -15°C | Weekly Timer (Optional)

Centralised On/Off (Optional) | M-NET connection (Optional) | Quick Clean | Self Diagnosis | Failure Recall | 12m 20m (FB25/35) | 15m 30m (FB50) | MXZ connection | Flare connection

Optional*: PAR-21MAA 7 Day Timer

*Requires MAC-397IF-E

For Further information on these features please see our web site: www.bdt.co.nz

Outdoor Units

MUZ-FB25/35VA

Dimensions (W x D x H): 800 x 285 x 550mm

MUZ-FB50VA

Dimensions (W x D x H): 840 x 330 x 850mm

sShhhh...

They're very, very quiet.

ENERGY STAR

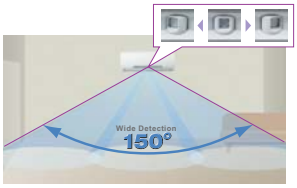
From 20dBA

Guaranteed Heating at -15°C

Air Purification

Unique Energy Saving Advanced Energy Saving i-see Sensor, provides Efficient Temperature Control.

While conventional heat pumps can give your room an average temperature, areas will stand out from the rest. Conventional thermostats simply can't measure the effects of factors such as radiant heat or cold drafts from windows that affect room temperature. The advanced "i-see sensor" detects more than just room temperature. Room temperature is measured at floor level as well at the unit resulting in greater temperature control.

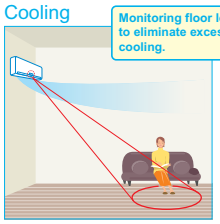


The unique energy saving "i-see Sensor" automatically moves from side to side, searching out temperature disparities. Wide airflow of 150° from left to right (90° in cooling mode) ensures all corners of the room are kept at an optimal temperature. The "i-see Sensor" measures hot and cool spots and focuses airflow to those specific areas. The "i-see Sensor" controls air temperature and air movement to prevent excessive heating or cooling and unnecessary operation. As a result, you are ensured total comfort while reducing energy wastage.

"Area Setting" - for waste-free, energy-saving heating and cooling.

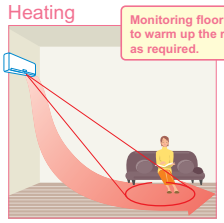
In AREA mode, efficient heating or cooling is targeted where it is really needed - the right side, left side or the room as a whole. The sensor can also operate only on the selected side.

Cooling



Cold air tends to drop to floor level, which is often the cause of over cooling. The i-see Sensor detects this foot-level temperature and adjust the air outlet temperature to prevent over cooling.

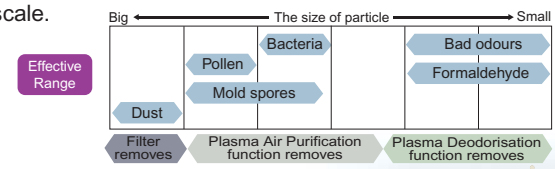
Heating



Warm air tends to rise up from the floor level, which often prevents that zone from warming up. The i-see Sensor detects this foot-level temperature and adjust air outlet flow to provide optimal temperatures.

PlasmaDuo Filter Systems

Besides a pre-filter, the unit is also mounted with two plasma air-purifying functions. These functions are engineered to remove airborne dirt particles from micron to nano-size in scale.

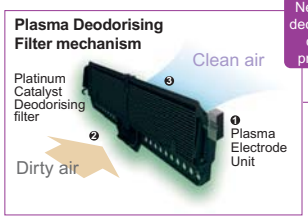


Plasma Electrode Unit

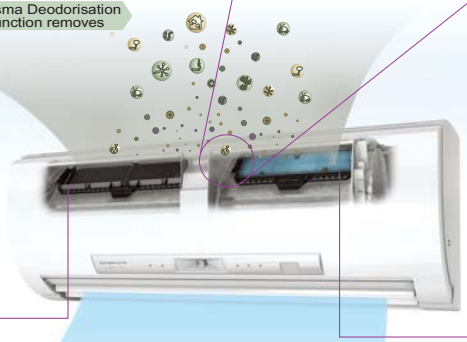
A plasma electrode unit is mounted inside the product. Electro-discharge is used to generate ozone & plasma. The combination of ozone & plasma and two special filters makes a dynamic plasma air cleaning function.

Plasma Deodorisation

"Platinum catalyst deodorising filter" is attached. Minimum holes as small as 1 nanometer on a surface of approximately 3,000m2 capture small foul-smelling substances in the air, then break down the source of the odours with the power of the ozone generated in a plasma electrode unit and the platinum catalyst contained in the filter.

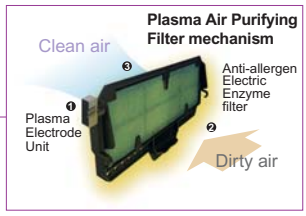


❶ Plasma electrode unit produces ozone.
❷ Particles of odour-releasing substances are absorbed.
❸ Particles of odour-releasing substances are decomposed by ozone.



Plasma Air Purification

"Anti-allergen electric enzyme filter" is attached. The power of the static electricity charged in the filter and the plasma generated in the plasma electrode unit team up to capture the bacteria, pollen and other allergens in the air, which are then neutralised with the enzyme in the filter.



❶ Plasma electrode unit produces plasma.
❷ Small particles are charged to negative by plasma.
❸ Small particles charged to negative are collected to the positive side of the electret filter and neutralised by enzyme.

What is the "Ozone Shower"?

This is a self cleaning function where the indoor coil will automatically be cleaned with Ozone after the unit has been operating in the cooling mode, to ensure the coil is clean and free from impurities.

Ozone (O_3) is resolved gradually and naturally into oxygen (O_2). This process creates an extremely efficient cleaning process. During resolving "Nascent oxygen (O)" is produced. The nascent oxygen strongly oxidises airborne particles to sterilise and deodorise the air.

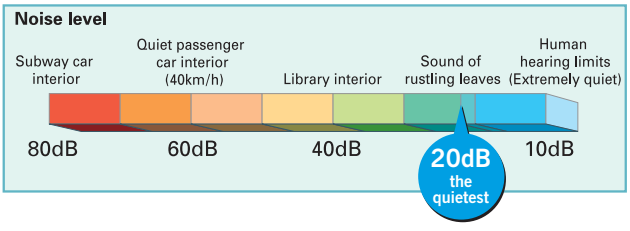
The consistency of ozone during ozone showering remains within health regulations.

The room is at 0.01ppm or less, this is the equivalent consistency of ozone at the beach or forest areas.

Whisper Quiet Operation

Only 20dB MSZ-FB25

Mitsubishi Electric have a long standing reputation for offering some of the quietest models in the industry. The Deluxe MSZ-FB range is no exception. At only 20 dB(A) in Low Fan Speed and capable of maximum output, the MSZ-FB25VA is the quietest Heat Pump in New Zealand. You want to feel the warmth, not hear it!



Controllers:

Optional: PAR-21MAA 7 Day Timer

Wake up or come home to optimal temperatures whilst conserving energy!

The controller allows your system to be programmed to maintain optimal temperature levels during the times when you are likely to be in the room. In the periods where you are unlikely to be there (such as during work hours or sleep time), the temperature can be set back to a minimum holding temperature instead of turning the system completely off.

Turning a system on and off typically uses the most energy because the system has to heat a room starting from a very low temperature. By maintaining a minimum holding temperature Mitsubishi Electric inverter technology saves you energy as the temperature only needs to be raised by a couple of degrees.

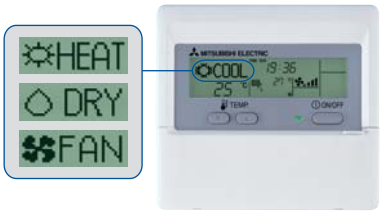
Most air conditioning systems come with a 24 hour remote controller. This means that you can only set the system up to automatically turn on and then off within a 24 hour period. This needs to be manually reactivated each time. The new Mitsubishi Electric 7 day timer allows you to program up to 8 separate Start/Stop patterns per day over a 7 day period.

For example:

- Between 6am and 9am set temperature to 21°C
- Between 9am and 5.30pm set temperature to18°C
- Between 5.30pm and 10pm set temperature to 21°C

Operation Control Function

The PAR-21MAA 7 Day timer also allows the temperature range to be limited to conserve energy by preventing excessive cooling and heating. The controller panel can also be locked off to prevent random modification.



The new clear and precise display is easy to understand for any user.

Optional: AG-150 Central Controller (with Touch Screen / Web)

Mitsubishi Electric offers the advanced AG-150 central controller. The colour touch screen allows user friendly control of the entire air conditioning system. The system can also be accessed from a computer using a web browser.

AG-150

Optional: MAC-821SC-E (Centralised ON/OFF Controller)

An optional Centralised ON/OFF Controller (MAC-821SC-E*) can also be incorporated to regulate all connected units in your home (and enabling ON/OFF selection and operation status confirmation from one single controller).

MAC-821SC-E

Note:
The PAR-21MAA and MAC-821SC-E both require the MAC-397IF-E adaptor per indoor unit.

MAC-397IF-E

Specifications:

MSZ-FB VA Deluxe Inverter Wall Mounted Heat Pump Model (R410A)

TYPE			Deluxe Wall Mounted Inverter Heat Pump		
MODEL NAME			MSZ-FB25VA	MSZ-FB35VA	MSZ-FB50VA
INDOOR UNIT			MSZ-FB25VA	MSZ-FB35VA	MSZ-FB50VA
OUTDOOR UNIT			MUZ-FB25VA	MUZ-FB35VA	MUZ-FB50VA
COOL	Capacity	[kW]	2.5	3.5	5.0
		Min-Max [kW]	1.1 - 3.5	1.1 - 4.1	0.8 - 5.8
	Input	[kW]	0.53	0.89	1.60
		Min-Max [kW]	0.26 - 0.97	0.26 - 1.12	0.26 - 2.45
	EER *(COP)*		4.76	3.93	3.13
		Star Rating	6.0	6.0	5.0
	Sound Level	In (Lo-SH*) [dB(A)]	20 / 29 / 36 / 42	20 / 29 / 36 / 43	29 / 39 / 45 / 52
		Out [dB(A)]	46	47	54
	Rated Current (In/Out)	[A]	2.6	4.1	7.1
		Max Current [A]	10	10	16
	Air Volume In (Lo-SH*)	[L/s]	77 - 187	77 - 187	105 - 247
HEAT	Capacity	[kW]	3.2	4.0	6.0
		Min-Max [kW]	1.5 - 5.5	1.5 - 6.0	0.9 - 7.8
	Input	[kW]	0.66	0.90	1.64
		Min-Max [kW]	0.48 - 1.90	0.48 - 1.90	0.48 - 2.95
	COP		4.89	4.44	3.66
		Star Rating	6.0	6.0	5.5
	Sound Level	In (Lo-SH*) [dB(A)]	20 / 29 / 36 / 43	21 / 29 / 36 / 44	27 / 37 / 43 / 50
		Out [dB(A)]	46	50	56
	Rated Current (In/Out)	[A]	3.1	4.1	7.3
		Max Current [A]	10	10	16
	Air Volume In (Lo-SH*)	[L/s]	75 - 202	78 - 208	92 - 247
Controller			Infra Red Remote *(Optional: PAR-21MAA)*		
Power Supply (Powered from outdoor unit)			230V / Single Phase / 50 Hz		
INDOOR	Dimensions (WxDxH)	[mm]	798 x 257 x 295		
	Weight	[kg]	12		
OUTDOOR	Dimensions (WxDxH)	[mm]	800 x 285 x 550	800 x 285 x 550	840 x 330 x 850
	Weight	[kg]	36	36	55
	Sound Level	[dB(A)]	46	47 - 50	54 - 56
EXT. PIPE	Diameter (Liquid/Gas)	[mm]	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max. Length/Height †	[m]	20 / 12	20 / 12	30 / 15
	Chargeless	[m]	7	7	7
OPERATION RANGE Outdoor	Cooling	[°C]	-10 / +46	-10 / +46	-10 / +46
	Heating	[°C]	-15 / +24	-15 / +24	-15 / +24

Quick Clean

The easily detachable front panel is simple to wash, and the airflow vents can be opened without any special tools for cleaning inside.

*Optional Quick Clean Kit.

5 Year Warranty

Mitsubishi Electric Air Conditioners / Heat Pumps come with a full 5 year parts, labour and compressor warranty. Warranty conditions apply. Please be aware of these conditions prior to purchasing this product.

Note:
1. Rating Conditions (AS / NZS 3823)
Cooling — Indoor: 27°C DB, 19°C WB Outdoor: 35°C DB
Heating — Indoor: 20°C DB Outdoor: 7°C DB, 6°C WB
Refrigerant piping length (one way): 5 m
2. Guaranteed operating range: see specifications table
3. Dry function will not work when the room temperature is below 13°C

*Sound Level: Low / Medium / High / Super High. (SH = Super High).

Colour: Heat pump units shown may not be colour accurate, please ensure you view an actual unit for colour matching.

† Maximum length is inclusive of height differential. i.e. (20/12) means the pipe can be 12m high and 8m across for a total length of 20m.

MITSUBISHI ELECTRIC

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New publication effective **September 2008**.

All features and specifications are subject to change and amendment at anytime.
Where specifications are critical to design or pre-build we advise that you seek confirmation of accuracy from our product management team on (04) 560 9100.

Try me for size!

This is the actual size of the MSZ-FB25 / 35 / 50VA

Dimensions (W x D x H): 798 x 257 x 295mm